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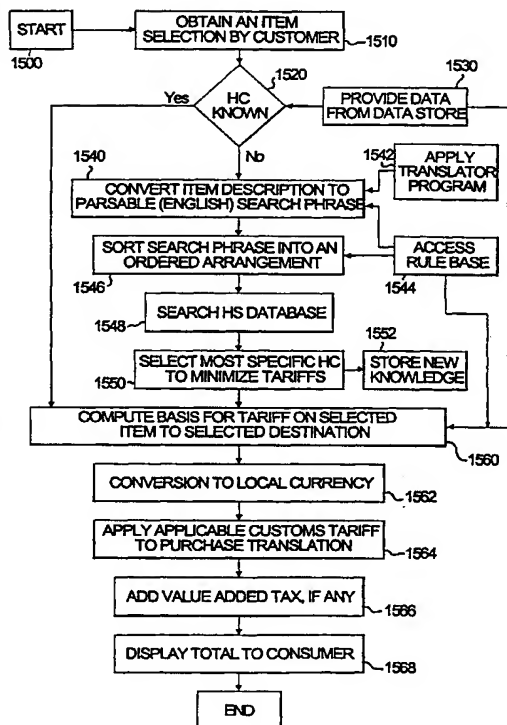
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(54) Title: AUTOMATIC SYSTEMS AND METHODS FOR INCLUDING CUSTOMS TARIFFS IN E-COMMERCE TRANSACTIONS



(57) Abstract: The invention provides systems and methods for facilitating international electronic commerce through a distributed computer network such as the Internet. The method includes the steps of obtaining purchase transaction details (1510) concerning one or more items that are to be purchased, processing at least a portion of the purchase transaction details to select a harmonized code for shipping (1520) the item to a prescribed destination at a minimum applicable tariff rate (1550), determining the tariff due for shipping each such item to a particular destination by applying the selected harmonization code (1560), and reporting the tariff due through the distributed computer network (1568). Preferably, the selection of a harmonized code includes searching through a tariff schedule of the particular destination and identifying a harmonized code that best fits item descriptors included in the purchase transaction details.

5                   **AUTOMATIC SYSTEMS AND METHODS FOR INCLUDING  
CUSTOMS TARIFFS IN E-COMMERCE TRANSACTIONS**

                    This is a continuation-in-part of U.S. Patent Application Serial Number  
09/409,003, filed September 29, 1999, now pending, which is hereby incorporated by  
10   reference as if set forth in its entirety herein.

**FIELD OF THE INVENTION**

                    The present invention relates to systems and methods for facilitating  
international electronic commerce transactions, and more particularly relates to  
15   systems and methods which compute the relevant tariffs and provide suitable  
documentation in support of international commerce.

**BACKGROUND**

                    With the proliferation of electronic commerce transactions through  
20   distributed networks such as the Internet, merchandisers and service providers alike  
have enjoyed a far-reaching and greatly expanded customer base to which they can  
sell their wares and services. An obstacle remains, however, for international  
commercial transactions for which customs tariffs are due and for which  
documentation is required in order to ship the purchased items into the destination  
25   country.

                    The customs laws of many countries exclude from customs duties  
limited quantity purchases on the grounds that such purchases are personal in  
character rather than commercial. To avoid the complexities introduced by  
international customs requirements, many online merchandisers have exploited this  
30   exclusion by restricting their customers' ability to purchase more than a limited  
number of items at one time. For example, the Internet bookseller Amazon.com

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restricts its international customers to purchasing at most three books in a single transaction to avoid customs duties and related paperwork. Such online merchandisers have carved a path to avoid the complexities of customers tariffs, but at the same time have frustrated international commerce by requiring customers to make discrete purchases and pay the shipping and handling costs for separate, smaller shipments. Moreover, the additional shipping and handling costs can far exceed the customs duties that would otherwise would be owing on a single transaction. One can only speculate as to the scope of the effect this practice has had on the evolution of international electronic commerce transactions through the Internet.

What is needed in the art and has heretofore not been available is a system and method for facilitating international electronic commerce transactions. What is further needed in the art and has heretofore not been available is such a system which automatically includes appropriate customs tariffs in an electronic commerce transaction. A further benefit would be such a system which further generates the appropriate paperwork so that the international electronic commerce transaction can be delivered to a customer with minimal, if any, delay. The present invention satisfies these and other needs.

### **SUMMARY OF THE INVENTION**

The invention provides systems and methods for facilitating international electronic commerce through a distributed computer network such as the Internet. The method includes the steps of obtaining purchase transaction details concerning one or more items that are to be purchased, processing at least a portion of the purchase transaction details to determine the tariff due for shipping each such item to a particular destination, and reporting the tariff due through the distributed computer network. The system and method of the invention utilizes artificial intelligence in the determination of the minimum applicable tariff rate that is to be applied to a particular item purchase for a selected destination.

The purchase transaction details are processed, in accordance with one aspect of the invention, to select a harmonized code for shipping the item to a

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prescribed destination at a minimum applicable tariff rate. A tariff due is then determinable by applying the processed harmonized code. At least a portion of the purchase transaction details are analyzed in the selection of a harmonized code for shipping the item to a particular destination instead of simply looking-up a broad-  
5 category tariff rate.

In one particularly preferred arrangement, the selecting or processing step includes searching through a tariff schedule of the particular destination and identifying a harmonized code that best fits item descriptors included in the purchase transaction details.

10 In accordance with a more particular and preferred embodiment, the method includes the further steps of generating an invoice, an airway bill and a packing list from the purchase transaction details and providing same through the distributed computer network. Optionally, the tariff due can be reported in the local currency of the selected destination and/or in multiple currencies such in both the  
15 local currency of the selected destination and in United States currency.

Further aspects and features of the present invention can be appreciated from the appended Figures and accompanying written description.

#### **BRIEF DESCRIPTION OF THE DRAWINGS**

20 Fig. 1 illustrates the home page of a fictitious Web site, "XYZ Online;"  
Fig. 2 illustrates an item-selection page of the Web site of Fig. 1;  
Fig. 3 illustrates a ship-to page of the Web site of Fig. 1;  
Fig. 4 illustrates another item-selection page of the Web site of Fig. 1;  
Fig. 5 displays the items that were selected from the item-selection  
25 pages of Figs. 2 and 4 and included in a "shopping bag;"  
Fig. 6 displays checkout options available to the customer for purchasing the items in the shopping bag;  
Fig. 7 displays a billing-information form for providing billing  
information to the Web site of Fig. 1;

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Fig. 8 displays a shipping-information form for providing shipping information to the Web site of Fig. 1;

Fig. 9 provides the customer with a selection of shipping options;

Fig. 10 apprizes the customer of shipping costs in connection with the purchase transaction;

Fig. 11 presents a payment-form to the customer for completing the purchase transaction;

Fig. 12 presents the total-cost to the customer for the purchase transaction, including customs duties and any value-added tax in accordance with a first feature of the present invention;

Fig. 13 presents further information on the calculations of the customs duties owing and any value-added tax;

Fig. 14 is a display of an online receipt which the customer can print;

Fig. 15 is a flow diagram of a method in accordance with a preferred embodiment of the present invention;

Fig. 16 is a network arrangement that benefits from the systems and methods of the present invention;

Fig. 17A is an excerpt from the Harmonized Tariff Schedule of Great Britain which includes portions of Harmonized Code 6110;

Fig. 17B is an excerpt from the Harmonized Tariff Schedule of Great Britain which includes portions of Harmonized Codes 6210 and 6211;

Fig. 18 is an invoice of the purchase transaction that is prepared and forwarded to customs in accordance with a second feature of the present invention;

Fig. 19 is a shipment airway bill for the purchase transaction that also is prepared and forwarded to customs in accordance with the second feature of the present invention; and

Fig. 20 is a packing list for listing the items being shipped which is also prepared and forwarded to customs in accordance with the second feature of the present invention.

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**DETAILED DESCRIPTION OF A PREFERRED EMBODIMENT**

By way of overview and introduction, the present invention is described in connection with a purchase transaction through a United States based Web site, namely, XYZ Online. The invention has application in other contexts, including as a resource for reference by one business for a transaction with another business, by an individual for the individual's edification, and in other applications as described hereinbelow. The invention facilitates international electronic commerce by automatically determining the applicable customs duties and any value added taxes that may be owing as a result of a purchase from an entity in one country for delivery to a person or entity in another country.

Referring now to Figure 1, a home page 100 of XYZ Online is illustrated within the display of a conventional browser 110. The browser 110 includes navigation buttons to move forwards and backwards among various Web pages and provides further functionality including secure transmission of documents over the Internet or other distributed computer network, for example between the browser (at the client side) and a web server, such as the server hosting the XYZ Online website. The details of the browser 110 are conventional and from no part of the present invention.

With further reference to Fig. 1, the web page 100 includes information provided by the Web site XYZ Online such as a description of the goods and services that are available for purchase by the customer. By navigating through the pages of the XYZ Online Web site, a user can view and select various items for purchase. For example, by selecting the Men's Campus Shop button 120 causes an item-selection page 200 to be displayed on the web browser 110. For ease of illustration, the active window is displayed in Figs. 2-14 separate from the web browser 110; however, it should be understood that these Figures depict the presently active window of the web browser 110.

With reference now to Fig. 2, the item-selection page 200 is displayed as the active window in the web browser 110 (not shown). The item-selection page 200 provides details on a particular item that is available for selection at the XYZ

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Online website. In particular, that page describes a vest which is available for \$29.50 United States Dollars ("USD") in various colors and sizes as indicated at 210-230, respectively. An item description includes further details about the construction of the vest, the fabric from which it is made, and the manner in which it may be washed, at  
5 indicated at 240. A series of selection lists enable the user to select a color, size, quantity of the item and to provide information as to whom the item is to be shipped. The selection lists illustrate a set of choices made by the user including a color (e.g. navy) entered in selection list 250, a size (e.g., medium) in the selection list 260, and a quantity (e.g., 1 unit) in selection list 270. The ship-to selection list 280 is described  
10 in connection with Fig. 3 below. The page 200 further includes and "add to bag" button 290 which metaphorically signifies a desire to purchase the item.

With reference now to Figs. 2 and 3, the XYZ Online website may or may not know the identity of the individual entering the transaction at this stage. If the person's identity is known, then the ship to selection list box 280 can include a  
15 meaningful choice of persons to whom the item can be shipped to (e.g., to the user himself, to friends or relatives of the user, etc.). If, however, the identity of the user is not yet known to the system, then the only choice in box 280 will be "other," which causes a further Web page 300 to be displayed to the user so that the identity of the person to whom the item is to be shipped can be entered. The Web page 300  
20 preferably is a new page loaded for the purpose of providing the user with a text box 310 for entering the name of the person to whom the item is to be shipped. Upon pressing the continue button 320, the Web page 310 can be unloaded or closed, and the information provided in the text box 310 is automatically included in the field 280 of the item-selection Web page 200. Alternatively, the user can provide the ship-to  
25 information in a text-box within the form of the item-selection page 200.

When the item-selection data form is complete, the customer uses the "add to bag" button 290 to either continue shopping or purchase the selected item. Preferably, a client-side script or applet ensures that all required fields 250-280 of the form have been completed prior to posting the form to the server of the XYZ Online  
30 Web site.

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These forms, and others used in the system preferably are implemented using standard hypertext markup language (HTML). For example, the selection list for selecting a color in the item-selection page 200 can be defined using pseudocode as shown below.

```

5      <select name="colors">
        <option value="navy"> navy
        <option value="black"> black
        <option value="oat"> oat
        <option value="green_mountain"> green mountain
10     <option value="pumpkin"> pumpkin
        <option value="orange"> orange
        <option value="charcoal heather"> charcoal heather
      </select>

```

Also, the simple text entry fields can be implemented using the HTML singleton tag for an input, as shown below within the cell of a table.

```

      <table>
        <tr>
          <td><input type=text name=colors size=25></td>
20     </tr>
      </table>

```

In the event that the customer continues to shop, additional item-selection pages such as the Web page 400 can be displayed through the Web browser

110. The manner of displaying items for selection is not material to the present invention. For purposes of illustration, the Web page 400 displays an "original sweatshirt" which is available for selection at the XYZ Online Web site. The "original sweatshirt" costs \$24.50 USD, and is available in various colors and sizes, as indicated at 410-430, respectively. Addition descriptive detail is provided at 440 to

30 inform the customer and attract the customer's interest. That description includes the material from which the sweatshirt is made, the style of the cut ("crewneck") and laundering information. As described above in connection with the Web page 200, the color, size, quantity and ship to information are entered using selection lists 450-



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480. If the customer has already identified a person to ship the item to by entering data into the text box 310 of Fig. 3 or by selecting a person in the ship-to selection list 280, then the selection list 480 may include such person by default. The sweatshirt is added to a (growing) list of selected items using the add-to-bag button 490. On the other hand, the user can cancel the selection using the continue button 492.

Upon pressing the add-to-bag button 490, a bag-contents Web page 500 is called up as the active window. The bag-contents Web page itemizes the user's item selections, arranged by the person to whom the items are to be shipped. For example, the user who completed the forms of Figs. 2-4 elected to ship the selected items to "Ms. Phyllis J. Bala." Those items include the "Pro Fleece Vest," as indicated in row 510 and the "Original Sweatshirt," as indicated in row 520. The size, color choice, and quantity, as well as the price for each item are indicated in the respective rows of the bag-contents Web page 500. From this Web page, the customer is prompted to either change his or her order, remove an item from the order, or continue shopping. An order can be changed by selecting the item by name. For example, the data within the "item name" column can be selected to return to the item-selection Web page for that item. Thus, for example, a user selecting the "Pro Fleece Vest" using the hyperlink 530 is returned to the Web page 200 and the user selecting "original sweatshirt" using the hyperlink 540 is returned to the item-selection Web page 400. Items can be removed from the shopping bag using remove buttons 550, as illustrated. The remove buttons delete the item from the list of items to be purchased by that user. From the shopping-bag page, therefore, users can update their shopping bags (button 560), purchase the selected items ("checkout;" button 570), or continue shopping (button 580). Optionally, the data can be changed from this page as well (such as the size, color, quantity) by selecting one of those entries and changing its value. For example, the user can change their selection of a medium size sweatshirt to a large one by selecting the size data cell in row 530 and entering in a different value. Preferably, a client-side script or applet tests such manually entered changes to make sure that the value entered conforms with the set of valid values for the selected item. If the customer is done shopping, the checkout button will call a

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further web page such as the web page 600. On the other hand, if the customer wishes to continue shopping and call up other item selection web pages, then he or she uses the continue button 580.

When the customer is done shopping and wishes to checkout, a Web page such as Web page 600 is called up on the web browser 110. The Web page 600 provides the customer with checkout options including the ability to checkout online, in accordance with a preferred mode of the invention, and to place the order in another manner, for example, by telephone. Preferably, the customer can go back to a prior web page using a back button 630 if the customer is not ready to checkout.

In the event that the customer uses the online checkout button 610 to complete the order, then further Web pages are called up on to the customer's Web browser to obtain billing, shipping and payment information.

With reference now to Fig. 7, the customer proceeds to checkout by completing standard fields in a billing-information form 700. Various fields are provided for entering the customer's name (field 710), address (field 720), city, state/country, and zip code (fields 730-750, respectively). Other information can be solicited for order confirmation purposes such as a daytime phone number (field 760) and an e-mail address (field 770). Upon completing the billing information form 700, the customer presses a continue button 780 to call up a shipping-information form in window 800. The person to ship the items to ship to is known by the system from the data that was entered into text box 310 (see Fig. 3). Preferably, a client-side script tests whether the ship to name is the same or similar to the name in the billing information field 710, and, if so, fields 810-860 are populated with the information from fields 710-760, respectively. Otherwise, the customer must complete the ship-to information so that the system knows the complete mailing address and daytime phone number of the recipient. Optionally, a series of radio buttons 870 can be provided to provide a selection of gift packaging, unassembled gift boxes, or a gift-boxing service at an additional expense. Once the information in the ship-to window 800 has been completed, the customer proceeds further toward completing the transaction by pressing the continue button 880.

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The method for shipping is selected by the customer in window 900. For domestic shipments, the customer has a choice among several services; however, the system preferably determines from the information provided in the shipping information form 800 that the destination is an international address and presets the international shipping method as the default choice (see radio button 910). The customer completes the purchase transaction by pressing the continue button 920 and advancing to the payment-information Web page 1100. Optionally, the system can then present a window such as window 1000 in which the customer is apprized of the cost for shipping the selected goods. The customer then continues using the button 1010, or goes back, to a prior screening hitting the button 1020.

With reference now to Fig. 11, a payment-information form is illustrated in window 1100. The payment form includes standard fields for inputting the account to be charged (for example, using the radio buttons 1110), fields for entering in the expiration date 1120 and the credit card number 1130, and a series of fields 1140 for identifying the name, address and contact information of the card holder. Preferably, the fields 1140 are populated with data obtained from the billing-information form 700, in a conventional matter.

Once the payment method form has been completed, the purchase transaction is posted to XYZ Online (or whichever Web site the customer is interacting with) using submit button 1150. As described above, a client-side script or applet can be used to verify that all required fields and information have been provided by the customer.

The shopping-bag model described herein is one method for acquiring purchase transaction details which are processed in way which selects a harmonized code for shipping the item to a prescribed destination at a minimum applicable tariff rate; however, other models can be used for placing purchase orders such as the one-click model described in U.S. Patent No. 5,960, 411 of Hartman et al., assigned to Amazon.com, which is hereby incorporated by reference as if set forth in its entirety herein.

In accordance with one feature of the present invention, the customs

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duty and any value added tax that is owing for the items selected for purchase are computed automatically.

With reference now to Fig. 12, because the items are to be delivered from the United States (from XYZ Online) to Great Britain, the total cost of the purchase transaction includes both customs duties and a value-added tax. The rate of customs duties varies from country to country, as does the applicability and rate of value added taxes ("VAT"). The total cost for the items in the shopping bag, therefore, includes both of these items, but is a difficult quantity for many retailers to compute reliably.

In accordance with the invention, however, the XYZ Online Web site has access to a tariff server, described below, which processes portions of the purchase transaction details to determine the tariff due for shipping the selected items to the destination input by the customer. The page 1200 displays the total transaction cost using information provided by the tariff server. It should be understood, however, that the functionality of the tariff server can be incorporated at the XYZ Web site; the tariff-processing routines can be local or remote so long as it is in communication with other computers that request its service.

Thus, in addition to the value and freight charges for the selected items which are known to the XYZ Web site, a customs duty column 1210 and a value added tax column 1220 provide the customer with further information concerning the amount of the duty and/or VAT that are associated with each selected item. In addition, the total cost of each item in the local currency is initiated in column 1230 as a further feature for the customer's benefit. As illustrated, the customs duty due for one "Pro Fleece Vest," in the currency of Great Britain, where the item is to be shipped is £3.45, a 13% customs duty. In addition, there is a VAT due on this item in the amount of £2.55. For the selected sweatshirt, the customs duty is 15% and amounts to £3.51. The VAT for the sweatshirt £2.28. The total-cost window 1200 includes a hyperlink 1240 to see the details behind the calculations presented in the window 1200.

Referring now to Fig. 13, the details of the customs duty and VAT

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calculations are shown in the window 1300. The computations for each item that was selected are shown separate columns. In column 1310, the details for the "Pro Fleece Vest" are illustrated. Those details include the harmonized tariff that was used to compute the customs duty at line 1330, the applicable customs duty/tax at line 1340, the value added tax at line 1350, the conversion rate into the local currency of the cost-of-goods plus freight at 1360, and the amount of the customs duty and VAT due for such item, shown at line 1370 and totaled at line 1380. In like manner, the details for the selected "original sweatshirt" are specified, and the cost for all of the selected items is provided in the local currency (pounds) at line 1390 and in U.S. dollars at line 1392.

If the customer accepts the total cost and submits the purchases using the submit button 1150, the system preferably responds with an online receipt, such as shown in Fig. 14. The online receipt 1400 summarizes the information provided by the customer throughout the course of the online shopping experience. Specifically, the shipper, bill-to and ship-to information are summarized at the top of the receipt, the items purchased, their quantity, value, freight, customs duty and any applicable VAT are also specified along with total cost for each item and the total cost of the overall purchase transaction. (At least a portion of these "purchase transaction details" are provided as item descriptors to the tariff server for computing the applicable customs duty and VAT, if any.) In addition, the customer is preferably provided information which assists order tracking, including an invoice number 1410, an invoice date 1420, an order number 1430, an order date 1440, an airway bill ("AWB") tracking number 1450, and a reminder 1460 of the type of payment that was used to complete the purchase transaction. The customer can print the contents of the receipt by selecting the text 1470 and can continue to shop and explore the XYZ Online Web site using the button 1480.

With reference now to Figs. 15 and 16, the steps that are taken in order to determine the customs duty and VAT that may be owing for a given purchase transaction are described in connection with a standard network configuration in which a client-side browser 110 accesses an e-commerce enabled Web site 1630

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through a standard connection to the Internet 1620. The determination of such duties and taxes start at step 1500, either by invoking a routine running at a host Web site such as XYZ Online or by linking to (addressing) a tariff server 1610 which has been configured to perform the steps of Fig. 15 and return the customs duty and value-added tax amount.

In the preferred embodiment, the steps of Fig 15 are implemented by a tariff/VAT server 1610. Upon confirming a purchase transaction which is to be shipped internationally, the Website 1630 preferably conveys purchase transaction details ( "PTD") to the tariff VAT server 1610 for processing. In turn, the tariff/VAT server provides the Website 1630 with the customs duty owed and any VAT that might be due for the proposed purchase transaction. The tariff/VAT server 1610 preferably is a stand-alone server that can be accessed by a plurality of Websites 1630 or by customers through their own browsers 110. However, in the present discussion, the functionality and determinations made by the tariff/VAT server 1610 are accessed by the Website 1630 to apprise the customer of the customs duty and VAT owing for the proposed purchase transaction.

At step 1510, the server 1610 obtains item selections made by the customer from the Website 1630. A test is made at step 1520 to determine whether the harmonized code for the selected item is known to the system either with the item description or through a uniform product code (UPC) which is correlable to the Harmonized Codes. The harmonized code can be provided by the Web site 1630, but more typically only will be known to tariff server if the duty owing on that same item previously had been determined and is available to be provided from a data store at step 1530. In the event that the harmonized code is known, however, the tariff readily can be computed. On the other hand, if the harmonized code is not known, then further steps are required to identify the appropriate harmonized code for the selected item, as discussed next.

At step 1540, the item description provided by the Web site 1630 (or by a customer through the client side browser 110) is converted into a possible search phrase so that at least a portion of the purchase transaction details is in a condition for

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processing so that a harmonized code can be selected and a minimum applicable tariff rate can be determined. Preferably, a translator program is applied to the item description so that all searches of the Harmonic Tariff Schedule ("HTS") database are in one language. Preferably, the translator program converts all item descriptions into English, if not in English already. A rule base 1544 then operates on the item description in the prescribed language (e.g., English), using a dictionary to filter out words which do not appear in the HTS and a translator to convert words in an item description into a similar word defined in the HTS (e.g., "sweatshirt" can be converted to "jersey").

At step 1546, the resulting searchable phrase is sorted into an ordered arrangement suitable for parsing the HTS data base. The searchable phrase is arranged into an order suitable for parsing the hierarchical structure of a Harmonized Tariff Schedule. The ordered arrangement is formulated to be an intelligent search query for searching the Harmonized Schedule database at step 1548. As understood by those of skill in the art, the HTS is arranged in a hierarchical manner from general to specific within each of several categories. Thus, for example, textiles are arranged at a first level in terms of the type of product (for example, men's or boys' shirts, women's or girls' dress, etc.), at a second level in terms of the material (e.g., polyester, fine animal hair, etc.), and at a further level in terms of the weight of the material (e.g., how heavy the textile is). A particular item description provided to the tariff server 1610 by a given Web site 1630 may not specify all levels of detail required to make a final determination of the most appropriate harmonized code to use. Using the information provided, however, the HTS data-based is searched at step 1548 using the ordered search phrase from the item description.

For example, the original selected shirt is described in the window 400 as a "relaxed fit. crewneck. embroidered "XYZ original" logo at chest. 90% cotton/10% polyester, enzyme sandwashed for softness. machine wash." This information (field 440) is converted into a partial search phase at step 1540 using the rule base 1544. No translation is required because the description is in English. The rule base extracts from the item description the terms "crewneck" "90% cotton" and

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"10% polyester" and the term "sweatshirt" from the page title. The term "crewneck" is converted using the rule base into a term which appears in the HTS, namely, into the term "jersey." The garment descriptor "jersey" is a first level search criteria.

Fig. 17 illustrates a portion of the harmonized code ("HC") for Great Britain. The HC 6110 concerns "jerseys, pullover, cardigans, waist coats and similar articles, knitted or crocheted." The first level search criteria "jersey" identifies this harmonized code as being the relevant harmonized code. The search term "90% cotton" provides the second level criteria for selecting the appropriate subheading and a more specific HC. As can be seen from reviewing Fig. 17, the harmonized code 6110 is divided into several different material types including "of wool or fine animal hair" (line 5) and "of cotton" (at line 12). The "original sweatshirt" is not made of wool or fine animal hair and so the system continues to search through its HTS database until it arrives at line 12, "of cotton." In the "of cotton" category, there are different tariff rates available, depending on the specifics of the particular garment in question. Thus, the rate can be 12% (line 13) or 15% (line 17) depending on the particulars of the garment. The item description provided for the "original sweatshirt" does not clarify whether it is a lightweight fine knit polo or turtleneck jumper or pullover as required to obtain the 12% tariff. Therefore, the tariff server 1610 searches for higher-number subheadings within the 6110 heading and arrives at code 61102091, "other: men's or boys." The tariff for that classification is 15%, as indicated at 1710.

Referring again to Fig. 15, the tariff server 1610 searches the HTS database using the search phrase from step 154, which was extracted from the purchase transaction details, in an effort to locate the most detailed HC classification within a category to ensure that the correct and lowest applicable tariff is applied, as indicated at step 1550. When a subheading specific to the selected item cannot be located, the system defaults to an "other" subheading. Once a HC is identified, it is selected for use in computing the tariff that is due, as described below. In addition, the tariff server 1610 stores this new knowledge at step 1552 along with the item description (name and material), its size and weight (if specified), and the source (e.g.,



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XYZ Online). Such information can be provided at step 1530 to inform the test made at step 1520 and avoid the need to perform steps 1540-1552 thereafter. Thus, in the event that the tariff server 1610 is later requested to determine the tariff and any VAT due on the same item from the same source, the HC would be known to the tariff server 1610 and can be applied at step 1564 below to compute the tariff due.

Consequently, the software of the tariff/VAT server 1610 uses artificial intelligence programming to formulate intelligent search queries for searching a Harmonized Schedule database and making informed tariff/VAT determinations. In addition, the software of the tariff/VAT server learns from each proposed purchase transaction by storing information concerning any selection of harmonized tariff codes and determinations as to minimum applicable tariff rates to assist future analyses, evaluations, and tariff/VAT determinations.

The tariff computation is typically based upon either the cost-of-goods plus freight (C&F), or the cost-of-goods plus insurance plus freight (CIF). At step 1560, the cost of goods plus shipping is added together to define the basis for tariff and VAT calculations. This step can be done at the Web site 1630 instead of at the tariff server; however, because the basis for tariff calculations varies from country to country, it is greatly preferred to provide the cost of each item being purchased, the total shipping cost and any insurance as separate values to the tariff server 1610. When multiple items are being purchased in a single transaction, the rule base is accessed to determine whether and how to apportion the shipping charges among the selected items, as described in the Examples below.

The basis for computing tariffs varies with country to country, but typically is based on either the freight-on-board (FOB) cost, the cost plus insurance plus freight (CIF) or cost plus freight (C&F) basis. The software resident in the server that is configured to make the tariff/VAT determinations reviews electronic data representative of the customs laws and legislation of the destination country, that country's duty/tax, VAT and other tariff-related particulars. When computing tariffs on shipments with plural items, the treatment of freight charges under the tariff laws also can vary with the destination country and the varied treatment is implemented by

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the tariff/VAT server with reference to the electronic database maintained for each destination country. The database for each destination country can be maintained at a data store and provided as needed to inform the tariff computation. For example, some countries permit freight charges to be divided among items being shipped together, and other countries have a minimum established freight for a shipment to that country which must be used in the tariff computation and this disparate treatment of the same proposed purchase for two different destination countries can be accommodated by the tariff/VAT server as illustrated in the following Example.

#### **Example 1: Freight Charges In Tariff Calculations**

A customer selects a shirt and a pair of jeans to purchase. The shirt is \$20.00 United States Dollars ("USD") and the jeans are \$40.00 USD. The total value of the purchased items is \$60.00. At 1%, insurance adds \$0.60 USD. Total shipping charges to the customer are \$15.00 USD. Thus, before adding tariffs due, these items will cost the customer \$75.60 USD on a cost-insurance-freight basis to be delivered. However, customs in the destination country imposes a tariff which must be paid and documentary requirements which must be satisfied before the items are delivered to the customer. The tariff schedule for the destination country is referenced in order to determine the additional amounts owing for shipment into the destination country. In this example, CIF is the basis for the tariff computation.

- A. The destination is a European Union member which permits allocation of shipping charges among the items purchased. The CIF of the shirt for tariff purposes is therefore \$27.70 (\$20.00 cost plus \$0.20 insurance plus \$7.50 freight) and the CIF of the jeans for tariff purposes is \$47.90 (\$40.00 cost plus \$0.40 insurance plus \$7.50 freight). The tariff schedule of the destination country is now referenced using the values \$27.70 and \$47.90 to determine the required tariffs for these two items.

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- B. The destination is a Ukrainian country which has a minimum freight charge of \$15.00 established for each non-documentary item shipped into that country. Using this rule, the basis for tariff calculations is \$35.20 for the shirt (\$20.00 cost plus \$0.20 insurance plus \$15.00 freight) and \$55.40 for the jeans (\$40.00 cost plus \$0.40 insurance plus \$15.00 freight). The tariff schedule of the destination country is now referenced using the values \$35.20 and \$55.40 to determine the required tariffs for these two items.

10

---

### **Example 2: Use Of Harmonized Codes**

A customer selects a lined track suit to purchase. The track suit costs \$80.00 USD and the item description identifies it as being having a gortex outer shell and a cotton lining. At 1%, insurance adds \$0.80 USD. Total shipping charges to the customer are \$20.00 USD. Thus, before adding tariffs due, the coat will cost the customer \$100.80 on a cost-insurance-freight basis.

The harmonized code ("HC") for such a product is 62113331. Using the descriptive information provided about the product (track suit at the first level criterion, gortex ("man-made fiber") as the second level criterion, and the further description "with cotton lining", the tariff server identifies the garment under heading 6211, searches down to "other garments, mens' or boy's" and down further to "man-made fibers" and finally to "track suits." As a result, the HC identified is 62113331, with a tariff of 13%.

If the search phrase did not include the term "track suits," the tariff server would have defaulted to the "other" category at line 24, selecting upper and lower parts, potentially at a higher tariff rate. However, because the search phrase was more specific, a more appropriate subheading was identified.

---

### **Example 3: Use Of Knowledge Base To Inform Harmonized Code Selection**

A product is described at Web site 1630 as being a "cotton sweatshirt."

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The customer selects the cotton sweatshirt in men's size "medium" and a request is posted by the Web site 1630 for a tariff computation by the tariff server 1610. The search phrase leads the tariff server 1610 to HC 6110, line 12, "of cotton." However, there is no basis in the information provided by the Web site 1630 for making a more detailed subheading determination (e.g., the product weight or its shipping dimensions are not specified). Thus, the search defaults to "other" and selects the tariff rate 15% indicated at 1710. However, the information from the Web site 1630 included the fact that the garment was a men's size medium. By accessing the knowledge database, the tariff server 1610 can estimate the weight of the selected item based on knowledge of the weight of similarly described items from other sources. For example, another seller of "sweatshirts" may have described a men's size medium sweatshirt as being 500 g and the tariff server 1610 can utilize this information to minimize the tariffs due by using this weight to select "lightweight pullover" as a subheading and identify the tariff amount of 12% (indicated at 1720) as being appropriate for the transaction, thereby saving the customer 3% of the tariffs that otherwise would have had to have been paid. Otherwise, the tariff server will accept the highest tariff rate or will prompt the customer (directly or through the Website 1630) for further information.

---

Returning to the Fig. 15, the basis for the tariff calculation is converted at step 1562 to the local currency of the destination indicated by the customer in the ship-to form 800. At step 1564, the applicable customs tariffs are applied to the tariff basis substantially as described above and in the preceding Examples, by multiplying the tariff rate in the rightmost column of Fig. 17 by the tariff basis provided to or computed by the tariff server 1610. At step 1566, the value added tax is added, if any, and is computed in a similar manner, using a VAT schedule for determining the applicable rate for the selected item. Thereafter, the total amount due can be displayed to the customer as indicated at step 1568 in a window such as window 1200 at the Web site 1630.

Another feature of the present invention is now described with reference to Figs. 18-20.

-20-

Fig. 18 is an invoice which identifies the purchased items at a level of detail required by customs offices around the world. In particular, the invoice specifies the item by name and description, its unit price, the quantity purchased, the total price of the units purchased, the freight cost, and the total for that item. In addition, the shipper and recipient are identified on the invoice. All of this information is acquired by the tariff server from the purchase transaction details provided by the Web site 1630. The tariff server includes the airway bill ("AWB") number 1930 once an AWB has been generated, described next.

Fig. 19 illustrates the AWB having the level of detail required by customs offices. The AWB includes information sufficient to ensure proper delivery of the purchased items to the intended recipient. In particular, the AWB specifies the shipper's and recipient's respective addresses, the shipment details (e.g., "international non-document", shipper to pay), a description of the items (by reference to the packing list of Fig. 20), the declared value of the goods being shipped in both U.S. and local currency (field 1910), the harmonized code (field 1930), an indication that the shipper will pay destination duties, the total cost for shipping (\$25.00), and an AWB number 1930. Apart from the data in fields 1910-1930, the information in the AWB is obtained from the purchase transaction details are acquired by the tariff server from the Web site 1630. The data in fields 1910-1930 are supplied by the tariff server.

Fig. 20 is a packing list which accompanies the AWB and specifies the shipper, the destination, the items being shipped, their quantity and description. In addition, other details are provided for tracking purposes, including the AWB number 1930. As with the invoice and AWB, all of this information is acquired by the tariff server from the purchase transaction details provided by the Web site 1630.

The electronic documents of Figs. 18-20 are preferably generated by the tariff server and conveyed back to the Web site 1630 for forwarding to the designated customs office and for inclusion in the package of shipped goods. The recipient receives the packing list and airway bill with the items, and the purchaser receives the invoice. The purchaser receives all of the documents if the items are

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shipped to him, and customs always receives all of these documents. Preferably, the documents are forwarded in an electronic form to the designated customs office for early processing and to minimize any delay in clearing the items through customs. Once cleared, the items can be delivered to the destination without the need for a  
5 customs broker or intervention by a local delivery service. Consequently, the invention as embodied in the above-described preferred embodiment enables real-time processing of international electronic commerce transactions and provides an electronic commerce solution which readily can be implemented by a variety of online vendors and international shippers.

10               The present invention can be used in several distinct contexts to facilitate international commerce. The system can be implemented in a business-to-consumer context as described above, wherein an online retailer with access to the tariff server 1610 system provides a value-added service to its customers. The tariff server can also be accessed directly by customers through the Internet to facilitate an  
15 international transaction with an online retailer that does not have access to (that is, is not licensed under) the system. Similarly, customer-to-customer international transactions can be facilitated by direct access to the tariff server 1610 from the customer's Web browser 110, as well as business-to-business international transactions.

20               In the various contexts to which the present invention applies, vendors and Customers alike are not restricted to a particular country of origin or a particular shipper for handling. Also, the electronic transmission of shipping documents to the customs offices of the destination countries greatly facilitates the clearance of item purchases to better ensure a favorable shopping experience between vendors and their  
25 global customers. The system and method of the present invention shun a overly broad product category classifications (with arbitrarily high tariff rates for most item purchases) and rigid item-description requirements in favor of a more flexible and intelligent methodology for selecting a harmonized code to use and for computing the minimum applicable tariff rate that may be owing for a given international purchase  
30 transaction.

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In lieu of searching for a harmonized code, alternative classification schemes can be used with equal advantage provided that the search criterion results in the identification or determination of a minimum tariff rate to apply to an item being purchased.

5                   In accordance with a further aspect of the invention, the tariff server 1610 can be implemented in conjunction with the electronic issuance of letters of credit, as is now permitted in some countries such as Turkey and in some states of the United States, without having to go to a bank. An entity desirous of importing one or more items from a foreign country can utilize software such as is available at the tariff  
10   server 1610 to identify: the applicable harmonized codes and applicable duties and taxes (in both percentage and amount); the handling fees; and the transportation costs. The total of all costs for importing the item can then be included in a single, electronic letter of credit (e.g., when the terms of the sale are CIF), or can be apportioned among  
15   a letter of credit, a credit or debit card and cyber-cash (e.g., when the terms are FOB and the entity wishes to pay the shipper or tariffs by a separate instrument). In this regard, it should be noted that letters of credit are sometimes treated as transferrable and divisible even if such terms are not expressly stated in the letter of credit. In addition, the documents generated by the tariff server 1610 (see, e.g., Figs. 18-20) can be included with the electronic letter of credit.

20                   Preferably, and in accordance with this further aspect of the invention, upon reporting the tariff due for a particular item purchase, the user can then have a letter of credit issued electronically in an amount up to the total amount of the transaction, or can be charged for the total amount of the transaction with at least a portion being paid for through an electronically issued letter of credit.

25                   The present invention provides particular advantages when the item being purchased is a present for a person in a different country. Regardless of whether the present is purchased online or was already purchased, a user can access the tariff server 1610 (or other machine programmed with the software engine described herein) identify the destination country, provide the value of the product to  
30   be sent (one of the "purchase transaction details"), and view the applicable

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harmonized codes based on any further descriptive data input by the user concerning the product. As a result, a favorable customs duty, tax amount, transportation rate (for a given shipper), handling fee and the like can be presented to the user as a quote for approval. Upon approving, confirming or electing to have the product shipped using the shipper and service providers identified in the quote, the requisite documents are sent electronically and printed for use by the user in shipping the article to the designated destination country. The software preferably assesses a fee for this service to the user, to one of the service providers that the user has selected, to other service providers that competed in the quote, if any, or a combination of the foregoing.

10           The software of the present invention can be configured to provide access to tax, duties, harmonized tariff schedules as well as statistical and legislative data on import/export policies of local and foreign investments.

15           The foregoing written description is of a preferred embodiment and particular features of the present invention and is not restrictive of the many applications or the breadth of the present invention which is instead defined by the claims appended hereto and substantial equivalents thereof.



CLAIMS:

- 1     1.     A method for facilitating international electronic commerce through a  
2           distributed computer network, comprising the steps of:  
3           a)     obtaining purchase transaction details concerning an item to be  
4           purchased;  
5           b)     selecting a harmonized code for shipping the item to a particular  
6           destination by analyzing at least a portion of the purchase transaction  
7           details;  
8           c)     determining a tariff due by applying the selected harmonized code; and  
9           d)     reporting the tariff due through the distributed computer network.
- 1     2.     The method as in claim 1, wherein the selecting step includes searching  
2           through a tariff schedule of the particular destination and identifying a  
3           harmonized code that best fits item descriptors included in the purchase  
4           transaction details.
- 1     3.     The method as in claim 1, wherein the selecting step comprises using an  
2           artificially intelligent software routine.
- 1     4.     The method as in claim 1, including the additional steps of generating an  
2           invoice, an airway bill and a packing list from the purchase transaction details  
3           and providing same through the distributed computer network.
- 1     5.     The method as in claim 1, wherein the purchase transaction details include the  
2           cost of the item, the freight for shipping the item to the particular destination,  
3           and an item description.
- 1     6.     The method as in claim 1, wherein the method steps are performed by a  
2           programmed computer connected to the distributed computer network.

- 1     7.     The method as in claim 6, wherein the method steps are performed in real-  
2           time.
- 1     8.     The method as in claim 1, wherein reporting step includes providing the tariff  
2           due in the local currency.
- 1     9.     The method as in claim 8, wherein the reporting step further includes  
2           providing the tariff due in United States currency.
- 1     10.    A method for facilitating international electronic commerce through a  
2           distributed computer network, comprising the steps of:  
3           a)     obtaining purchase transaction details concerning an item to be  
4           purchased;  
5           b)     processing the purchase transaction details to thereby select a  
6           harmonized code for shipping the item to a prescribed destination at a  
7           minimum applicable tariff rate;  
8           c)     determining a tariff due by applying the processed harmonized code;  
9           and  
10          d)     reporting the tariff due through the distributed computer network.
- 1     11.    The method as in claim 10, wherein the processing step uses artificially  
2           intelligent software.
- 1     12.    The method as in claim 10, wherein the processing step includes searching  
2           through a tariff schedule of the particular destination and identifying a  
3           harmonized code that best fits item descriptors included in the purchase  
4           transaction details.

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- 1     13.     The method as in claim 10, including the additional steps of generating an  
2               invoice, an airway bill and a packing list from the purchase transaction details  
3               and providing same through the distributed computer network.
- 1     14.     The method as in claim 10, wherein the purchase transaction details include  
2               the cost of the item, the freight for shipping the item to the particular  
3               destination, and an item description.
- 1     15.     The method as in claim 10, wherein the method steps are performed by a  
2               programmed computer connected to the distributed computer network.
- 1     16.     The method as in claim 15, wherein the method steps are performed in real-  
2               time.
- 1     17.     The method as in claim 10, wherein reporting step includes providing the tariff  
2               due in the local currency.
- 1     18.     The method as in claim 17, wherein the reporting step further includes  
2               providing the tariff due in United States currency.
- 1     19.     In an electronic commerce computer server connected to a distributed  
2               computer network, a method for facilitating international electronic commerce  
3               with a customer connected to the server through the distributed computer  
4               network, comprising the steps of:  
5               a)        receiving at the server purchase transaction details concerning an item  
6                       to be purchased, the item to be purchased having a cost to the  
7                       customer;  
8               b)        selecting a harmonized code for shipping the item to a particular  
9                       destination by analyzing at least a portion of the purchase transaction  
10               details;

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- 1           c)       automatically determining a tariff due by applying the selected
- 2                    harmonized code;
- 3           d)       providing to the customer a total amount due for the item, the total
- 4                    amount including the tariff due and the cost to the customer; and
- 5           e)       receiving at the server payment of the total amount due.

1    20.    A software method operating within a programmed machine for determining a  
2           tariff due on an item, comprising:

- 3           a)       obtaining details concerning the item;
- 4           b)       selecting a harmonized code for shipping the item to a prescribed
- 5                    destination by analyzing at least a portion of the obtained details;
- 6           c)       determining a tariff due by applying the selected harmonized code; and
- 7           d)       reporting the tariff due.

1    21.    The software method as in claim 20, wherein the details utilized for selecting  
2           the harmonized code are selected from the group consisting of: product name,  
3           product description, percentages of ingredients in the product, product group,  
4           product category, bar code, machine readable code, product class, and material  
5           description.


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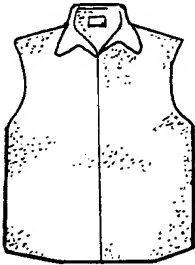
110

XYZ

XYZ Online ShopUSA

[Register](#)  
[Already registered?](#)  
[Sign In](#)

  
**XYZ**  
 ONLINE SHOPUSA  
 get set for fall  
 special prices  
 end august 29th



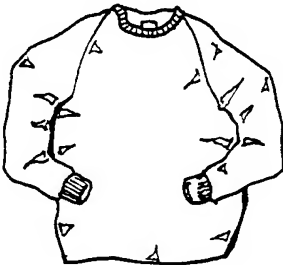
Departments


- [gift central](#)
- [men's](#)
- [women's](#)
- [jeans](#)
- [khakis](#)

Pro Fleece vest  
 \$29.50

> **MEN'S**  
 120 CAMPUS SHOP

> **WOMEN'S**  
 CAMPUS SHOP



win a new  wardrobe

[register here](#)

original sweatshirt  
 \$24.50

JEANS &  
 KHAKIS  
 \$29.50

■ WOMEN'S  
 ■ MEN'S

[style](#) | [store locator](#) | [company](#)

SELECT LANGUAGE

100

continue

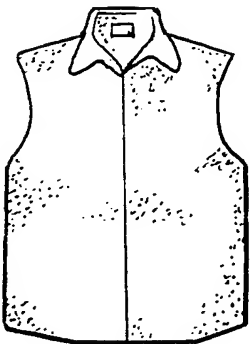
**Fig. 1**

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XYZ

XYZ Online ShopUSA





## Pro Fleece vest value

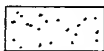
price: \$29.50  
 colors: navy, black, oat,  
 green mountain, pumpkin  
 orange, charcoal heather  
 sizes: XS-XXL


relaxed fit, chest and front  
pocket with zip closures.  
100% polyester. machine  
wash.

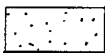
[zoom view](#)


  
navy

  
black

  
oat

  
green  
mountain

  
pumpkin  
orange

  
charcoal  
heather

Make your selections  
below and click  
"add to bag."

colors

size

quantity

ship this item to:

continue

200

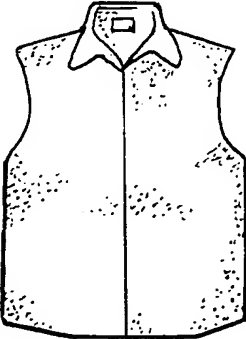
**Fig. 2**

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XYZ

XYZ Online ShopUSA

who would you like to ship this item to?



Pro Fleece vest

You will be asked to supply this person's shipping information when you check out.

Name

Phillis Bala

 310  
example: "Mom" or "Bobby"

300

continue

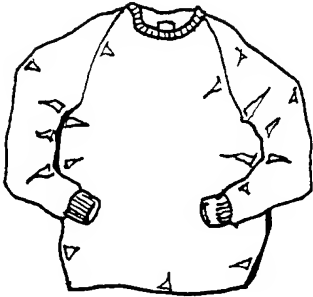
 320**Fig. 3**

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XYZ

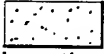
XYZ Online ShopUSA


## original sweatshirt <sup>value</sup>





price: \$24.50  
 colors: heather gray, navy, natural, green mountain, canoe red, gray smoke  
 sizes: XS-XXL  
 relaxed fit, crewneck, embroidered "XYZ original" logo at chest. 90% cotton/10% polyester, enzyme sandwashed for softness. machine wash.


Make your selections below and click "add to bag."


  
 heather gray

  
 navy


  
 natural

  
 green mountain


  
 canoe red

  
 gray smoke


colors  

heather gray



size  

M


quantity  

1


ship this item to:  

Phillis J. Bala


add to bag

continue

400

**Fig. 4**



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XYZ

XYZ Online ShopUSA

## your shopping bag

To change your order, click on the item name below.  
 To remove an item from your order, check the box to the left of the item, then click on the update button  
 To continue shopping select

ship to: Phillis J. Bala

remove	store	item name	size	color	quantity	each	total
<input type="checkbox"/>	530	<a href="#">Pro Fleece vest</a> #1316050120002	M	navy	1	\$29.50	510 \$29.50
<input type="checkbox"/>	540	<a href="#">original sweatshirt</a> #1316050120002	M	heather gray	1	\$24.50	520 \$24.50

update  
560

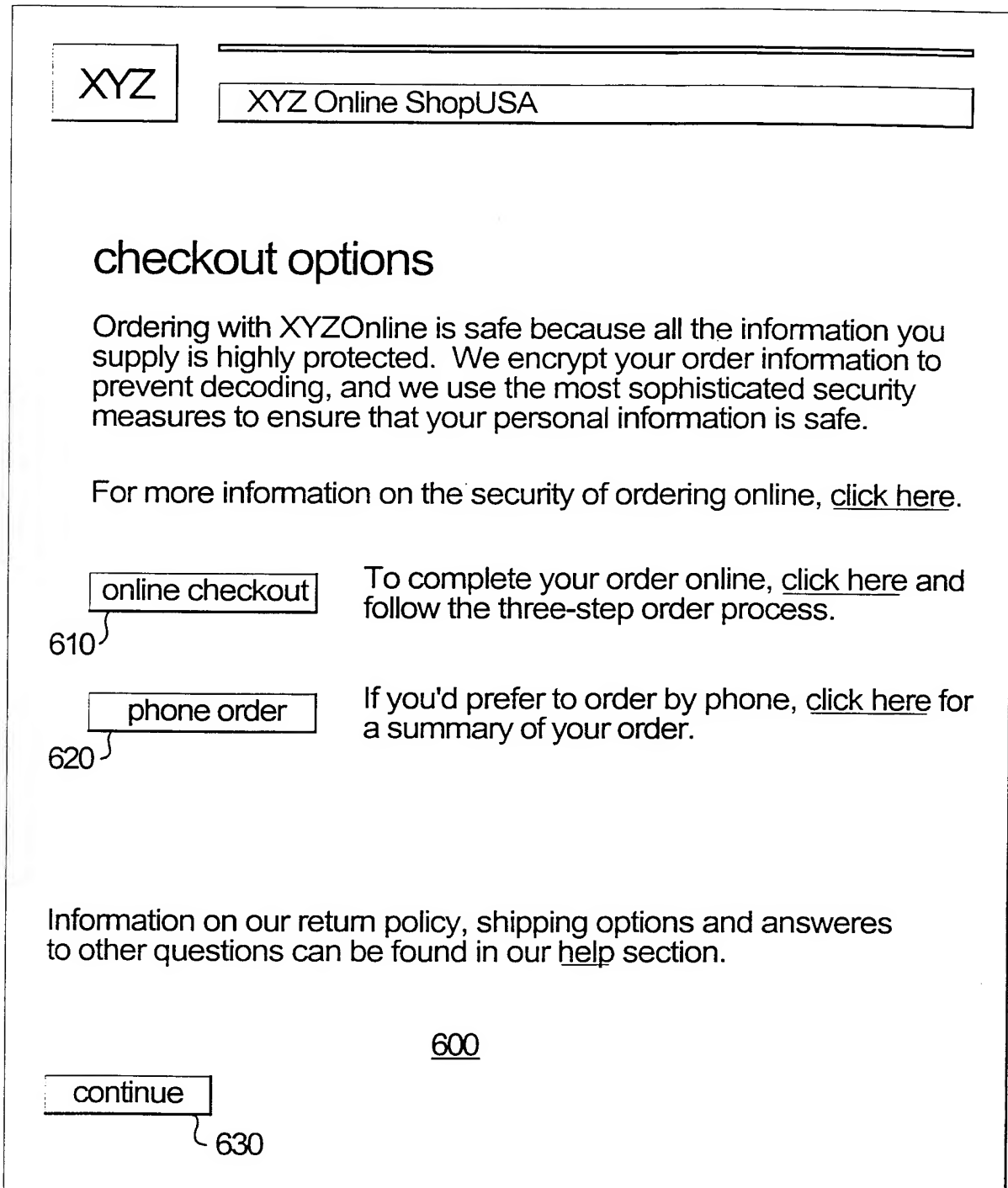
checkout  
570

continue  
580

500

**Fig. 5**

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**Fig. 6**

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XYZ

XYZ Online ShopUSA

**your billing information**  
Please enter information as it appears on your credit card statement.

first name:  initial:  last name:  ~710

address:  
 ~720

city:  
 ~730

state or country  740 zip code:  750

Please select a state.

day phone: (incl. area code)  
 ~760

Please enter a 10-digit phone number

email: (must be correct for us to send you a confirmation of your order)  
 ~770

continue

700

780

**Fig. 7**

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XYZ

XYZ Online ShopUSA

shipping information

ship to: Phillis J. Bala

first name: initial: last name:

Phillis J Bala 810

address:

30 Madia Vale 820

Oxford Street

city:

London 830

state or country 840 zip code: 850

ENGLAND LMV 43577

day phone: (of recipient, incl. area code)

44 71 342567 860

Gift Packaging ([Click here](#) for gift packaging options)

☒ no gift packaging

☐ unassembled XYZ gift boxes (complimentary)

☐ special XYZ gift boxing service (\$5.00 per box)

870

continue 880

800

**Fig. 8**

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The screenshot shows a web page for 'XYZ Online ShopUSA'. At the top left is a logo with the text 'XYZ'. To its right is a horizontal bar containing the text 'XYZ Online ShopUSA'. Below this, the heading 'shipping' is followed by 'shipping options' and 'shipping method'. A paragraph states: 'Your entire order will be shipped via the shipping method you select. [Click here](#) for shipping rates and carrier information.' Below this is a list of four shipping options, each preceded by a radio button. The first three options are 'standard (continental U.S. street addresses)', 'standard (AK, HI, PO boxes, rural routes, APO/FPO)', and 'overnight (continental U.S. street addresses only)'. The fourth option, 'international (customs clearance)', is selected, indicated by a filled radio button. A callout line from the number '910' points to this selected option. Below the list, a section titled 'Other shipping related notes:' contains two bullet points: '- Standard deliveries will be processed within 1-2 business days.' and 'Overnight deliveries will be shipping the same business day if the order is received by 12 noon EST and credit card authorization is obtained.' At the bottom left, there is a button labeled 'continue'. A callout line from the number '920' points to this button. At the bottom center, the number '900' is underlined.

XYZ

XYZ Online ShopUSA

shipping  
shipping options  
shipping method

Your entire order will be shipped via the shipping method you select. [Click here](#) for shipping rates and carrier information.

- ☐ standard (continental U.S. street addresses)
- ☐ standard (AK, HI, PO boxes, rural routes, APO/FPO)
- ☐ overnight (continental U.S. street addresses only)
- ☒ international (customs clearance)

910

Other shipping related notes:  
- Standard deliveries will be processed within 1-2 business days.  
Overnight deliveries will be shipping the same business day if the order is received by 12 noon EST and credit card authorization is obtained.

continue

920

900

**Fig. 9**

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XYZ	XYZ Online ShopUSA	
your international shipping cost		
total purchase	shipping cost	
\$0-\$50	\$12.50	
\$50.01-\$100	\$25.00	
\$100.01-\$175	\$35.00	
\$175.01-\$500	\$55.00	
total weight	shipping cost	
1lb-5lbs	\$10.00	
5.01lbs-10lbs	\$22.00	
10.01lbs-20lbs	\$32.00	
20.01lbs-25lbs	\$45.00	
international shipments		
<p>All international shipments are realized within 5-10 days depending on the customs formalities of the destination country. Before you check out (submit final purchase), you will be able to see the shipping cost, customs duty/tax, and local VAT on your order. Furthermore, after you order is placed, you will be able at all times to track the status of your shipment with your order number by accessing our website at <a href="http://www.xyzonlineshopusa.com">www.xyzonlineshopusa.com</a>.</p>		
back	1020	<u>1000</u>
continue	1010	

**Fig. 10**

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XYZ

XYZ Online ShopUSA

your payment method

Credit Card Type: ☐ Visa ☒ MC ☐ Discover ☐ Amex 1110

Expiration date: mm  -yy  1120

Card Number:

First Name:

Last Name:

Contact Phone:

Contact Email:

Address:

City:

State/Province:

Postal/Zip Code:

Country:

\* For security reasons we recommend entering a non web-based email address. If you only have a web-based email address please enter the address and continue.

1150 1100

**Fig. 1 1**

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XYZ

XYZ Online ShopUSA

your total cost

Item Name	Quantity	Value	Freight	Customs Duty Tax	VAT	Total
Pro Fleece Vest #1316050120002	1	\$29.50	\$12.50	£3.45(13%)	£2.55	£32.59
Original Sweat Shirt #1316050120002	1	\$24.50	\$12.50	£3.51(15%)	£2.28	£29.21

1210  
Customs  
Duty  
Tax

1220  
VAT

1230  
Total

YOUR TOTAL COST      £61.80

YOUR TOTAL COST      \$97.64

your payment method    ☐ Visa    ☒ MC    ☐ Discover    ☐ Amex    ☐ Cybercash

Click here to see details of calculations.

continue

1200

**Fig. 12**



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<div style="border: 1px solid black; padding: 5px; font-size: 24px; font-weight: bold;">XYZ</div>	<div style="border: 1px solid black; padding: 5px; font-size: 18px; font-weight: bold;">XYZ Online ShopUSA</div>
---	--

### details of calculations

Pro Fleece Vest	1310	{	1330
Harmonized Tariff: 6211 3341 00			
Customs Duty/Tax: 13%	1340		
Local VAT: 8.5%	1350		

Price	\$29.50
Shipping	\$12.50
	\$42.00
Conversion (Rate 1.58)	£26.58
Customs Duty/Tax (13%)	£3.45
	£30.03
VAT: 8.5%	£2.55
	£32.59

1370

your total cost in £

your total cost in \$

Original Sweat Shirt	1320
Harmonized Tariff: 61106 2091 00	
Customs Duty/Tax: 15%	
Local VAT: 8.5%	

Price	\$24.50
Shipping	\$12.50
	\$37.00
Conversion (Rate 1.58)	£23.41
Customs Duty/Tax (13%)	£3.45
	£26.93
	£2.28
	£29.21

1390

£61.80

\$97.64

PRINTABLE PAGE

[Click here](#) to return to previous page to submit your order.

1300

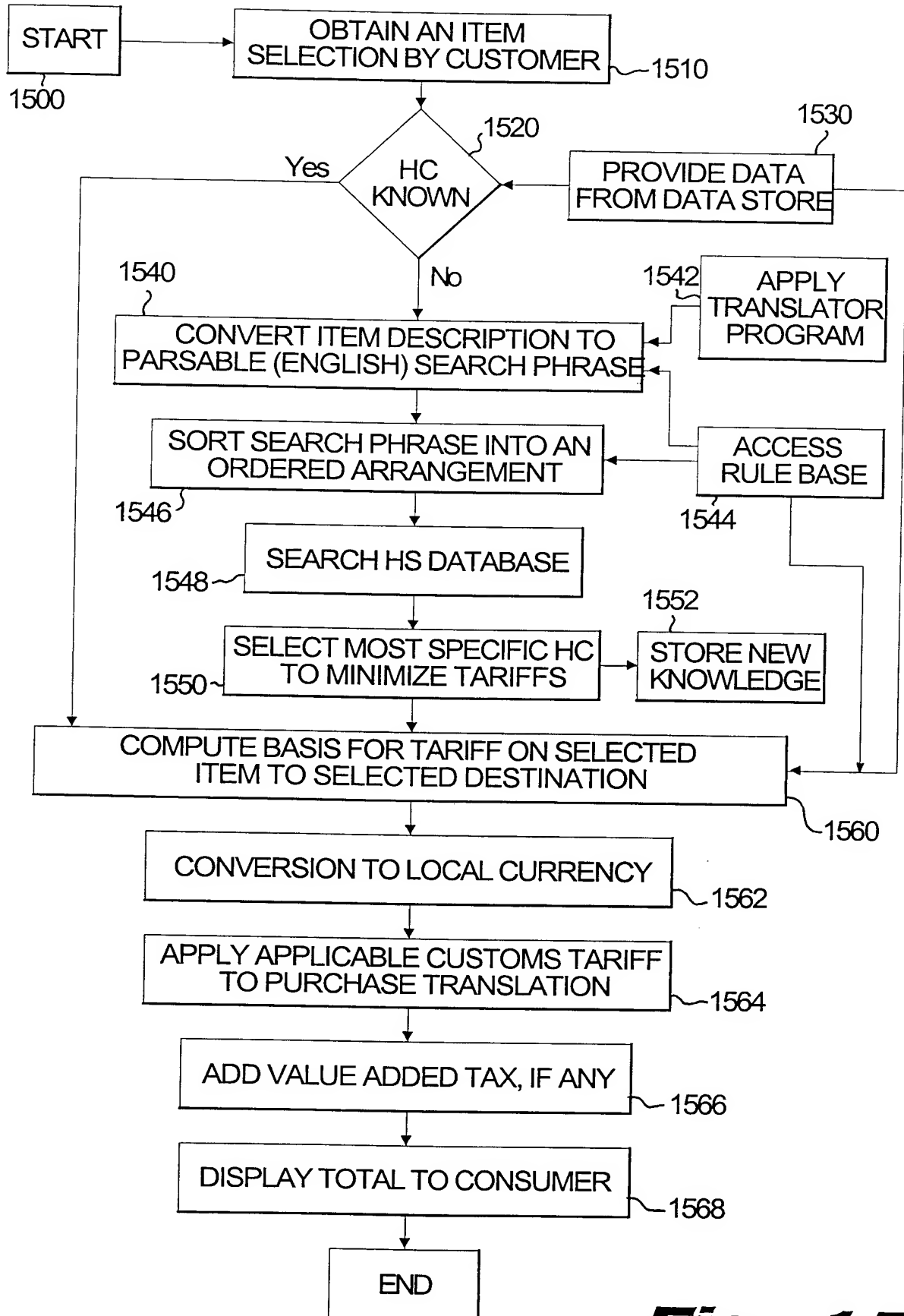
**Fig. 13**

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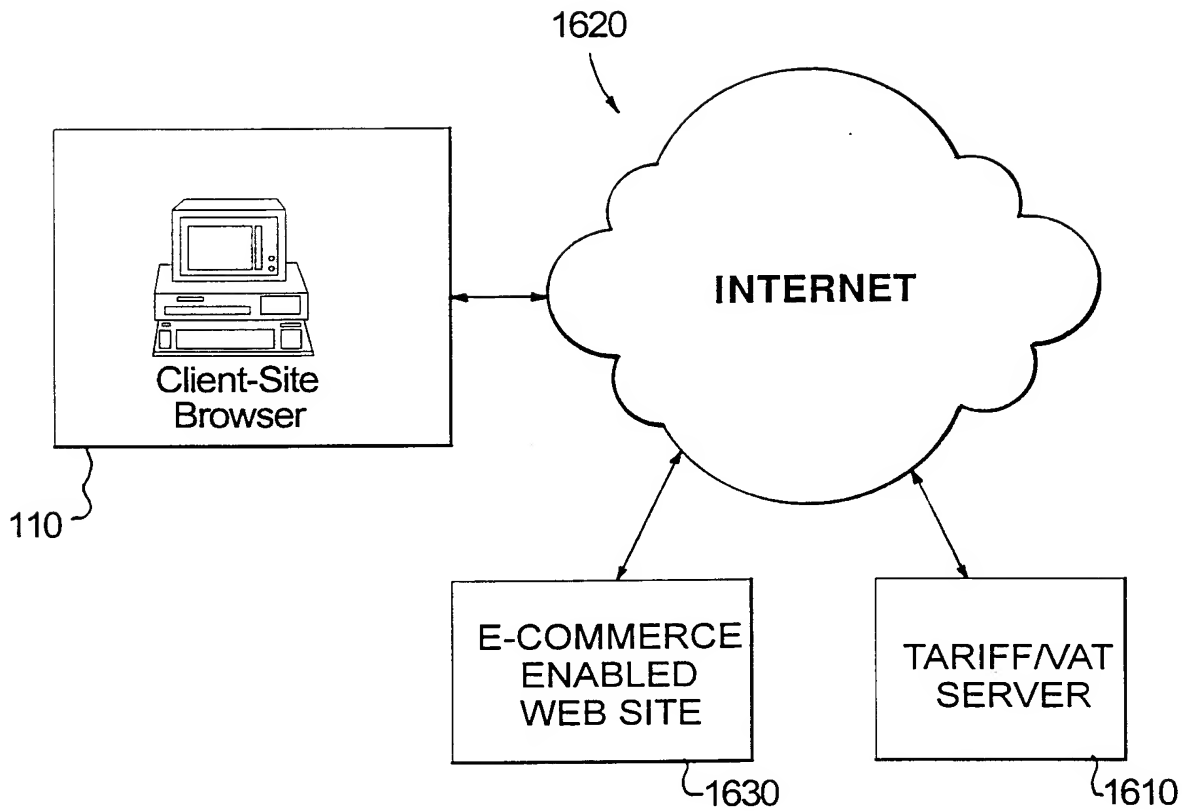
<div style="border: 1px solid black; padding: 5px; display: inline-block;">XYZ</div>		<div style="border: 1px solid black; padding: 5px; display: inline-block;">XYZ Online ShopUSA</div>	
your receipt			
<b>SHIPPER</b> XYZ Onlineshop USA 210 Lexington Avenue New York, NY 10221 USA Tel. 212 555 5555 Fax 212 555 5550		<b>BILL TO:</b> Phillis J. Bala 30 Madia Vale London LMV 43577 England Tel. 44 71 342567 Fax N/A	
		<b>SHIP TO:</b> Phillis J. Bala 30 Madia Vale London LMV 43577 England Tel. 44 71 342567 Fax N/A	
Customs			
Duty			
Tax			
Item Name	Quantity	Value	Freight
Pro Fleece Vest #1316050120002	1	\$29.50	\$12.50
		£3.45(13%)	£2.55
		£32.59	
Original Sweat Shirt #1316050120002	1	\$24.50	\$12.50
		£3.51(15%)	£2.28
		£29.21	
YOUR TOTAL COST			£61.80
YOUR TOTAL COST			\$97.64
Invoice No.	:1226788	~1410	
Invoice Date	:05/30/99	~1420	
Order No.	:4005001	~1430	
Order Date	:05/30/99	~1440	
AWB No.	:0009365	~1450	
Payment	:Master Card	~1460	
"You may print this information for your records"			
PRINTABLE PAGE			~1470
continue		~1480	
			1400

**Fig. 14**

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**Fig. 15**

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**Fig. 16**

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	Article Description	Heading/ Subheading	Stat. Suffix	Rates of Duty	
1	61 10				
2	JERSEY, PULLOVERS, CARDIGANS,				
3	WAISTCOATS AND SIMILAR ARTICLES,				
4	KNITTED OR CROCHETED				
5	Of wool or fine animal hair:				
6	Jerseys and pullovers, consisting				
7	at least 50% by weight of wool	611010	00	1.Kg	10.5%
8	and weighing 600g or more per	10		2.Number	
9	article (TEXT 0051)				
10	****				
11	Other (TEXT 006)		90	1.Kg	13%
				2.Number	
12	Of cotton:				
13	Lightweight fine knit, polo or	611020	00	1.Kg	12%
14	turtle neck jumpers and	10		2.Number	↖ 1720
15	pullovers (TEXT 004)				
16	Other:				
17	Men's or boys' (TEXT 005)	611020	00	1.Kg	15%
		91		2.Number	↖ 1710
18	Women's or girls' (TEXT 005)	611020	00	1.Kg	15%
		99		2.Number	

**Fig. 17A**

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	Article Description	Heading/ Subheading	Stat. Suffix	Rates of Duty	
1	61 10				
2	JERSEY, PULLOVERS, CARDIGANS,				
3	WAISTCOATS AND SIMILAR ARTICLES,				
4	KNITTED OR CROCHETED				
5	Of wool or fine animal hair:				
6	Jerseys and pullovers, consisting				
7	at least 50% by weight of wool	611010	00	1.Kg	10.5%
8	and weighing 600g or more per	10		2.Number	
9	article (TEXT 0051)				
10	****				
11	Other (TEXT 006)		90	1.Kg	13%
				2.Number	
12	Of cotton:				
13	Lightweight fine knit, polo or	611020	00	1.Kg	12%
14	turtle neck jumpers and	10		2.Number	
15	pullovers (TEXT 004)				1720
16	Other:				
17	Men's or boys' (TEXT 005)	611020	00	1.Kg	15%
		91		2.Number	1710
18	Women's or girls' (TEXT 005)	611020	00	1.Kg	15%
		99		2.Number	

**Fig. 17B**

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## INVOICE

**SHIPPER:**

XYZ Onlineshop USA  
 210 Lexington Avenue  
 New York, NY 10221  
 USA  
 Tel. 212 555 5555  
 Fax 212 555 5550

**SHIP TO/BILL TO:**

Phillis J. Bala  
 30 Madia Vale  
 London LMV 4577  
 England  
 Tel. 44 71 342567

Invoice No.: 1226788

Invoice Date: 05/30/99

Order No.: 4005001

Order Date: 05/30/99

AWB No.: 0009365

Payment: MasterCard

1930

ITEM	DESCRIPTION	UNIT PRICE	QUANTITY/ UNIT	TOTAL PRICE	FREIGHT COST	TOTAL
Pro Fleece Vest 131605012002	relaxed fit. chest and front pocket with zip closures. 100% polyester. machine wash. navy. medium size.	\$29.50	1	\$29.50	\$12.50	\$42.00
Original Sweat Shirt 1316310020002	relaxed fit. crewneck, embroidered xyz original logo at chest. 90% cotton/10% polyester, enzyme sandwashed for softness. machine wash. heater gray. medium size.	\$24.50	1	\$24.50	\$12.50	\$37.00

***Fig. 18***

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AWB		Shipment Airwaybill (Non negotiable)		1930 0009365		USA		GB	
1 From (Shipper)		XYZ 899700		CS-1700		4		Pcs/Weight/Size	
XYZ ONLINESHOP USA		XYZ ONLINESHOP USA				ONE BOX			
210 LEXINGTON AVE NEW YORK - USA		3		Shipment details		N/A			
NY 10221		212 555 5555				N/A			
2 To (Recipient)		N/A							
PHILLIS J. BALA									
30 MADIA VALE LONDON				AS PER PACKING LIST					
LMV 4359		44 71 342567		\$79.00(£49.99)		N/A		PICKUP	
5 Shipper's authorization and signature		6211 - 6100		LONDON LMV 4355		TOTAL		\$25.00	
		02456				9062			
XYZ ONLINE		05/30/99				CRD		5:30 PM	

**Fig. 19**



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**PACKING LIST****SHIPPER:**

XYZ Onlineshop USA  
210 Lexington Avenue  
New York, NY 10221  
USA

**SHIP TO/BILL TO:**

Phillis J. Bala  
30 Madia Vale  
London LMV 4577  
England

Invoice No.: 1226788  
Invoice Date: 05/30/99  
Order No.: 4005001  
Order Date: 05/30/99  
AWB No.: 0009365

1930

ITEM	DESCRIPTION	QUANTITY/ UNIT
Pro Fleece Vest 131605012002	relaxed fit. chest and front pocket with zip closures. 100% polyester. machine wash. navy. medium size.	1
Original Sweat Shirt 1316310020002	relaxed fit. crewneck, embroidered xyz original logo at chest. 90% cotton/10% polyester, enzyme sandwashed for softness. machine wash. heater gray. medium size.	1

***Fig. 20***

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US00/07729

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G06F 17/60  
US CL : 705/26

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 705/26, 27, 31; 709/201, 202, 203, 217, 218, 219

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EAST (USPATfiles, Derwent, JPO, EPO), Dialog (financial and business databases) (see attached)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,721,832 A (WESTROPE et al) 24 February 1998, col. 2, lines 62-67, col. 3, lines 20-30, lines 35-38, lines 55-61, col. 4, line 55-58, col. 5, lines 24-27, lines 46-52, col. 6, lines 43-50.	1, 2, 4-10, and 12-21
A	US 5,335,169, A (CHONG) 02 August 1994, see abstract.	1-21
A, P	US 5,987,429 A (MARITZEN et al) 16 November 1999, see abstract.	1-21
A, P	US 6,003,008 A (POSTREL et al) 14 December 1999, see abstract.	1-21

☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
*A* document defining the general state of the art which is not considered to be of particular relevance	*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
*E* earlier document published on or after the international filing date	*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
*L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	*Z* document member of the same patent family
*O* document referring to an oral disclosure, use, exhibition or other means	
*P* document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

04 JUNE 2000

Date of mailing of the international search report

06 JUL 2000

Name and mailing address of the ISA/US  
Commissioner of Patents and Trademarks  
Box PCT  
Washington, D.C. 20231

Facsimile No. (703) 305-3230

Authorized officer

EMANUEL TODEVOELTZ

Telephone No. (703) 305-9714

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US00/07729

## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	ANONYMOUS. FROM2.COM ALLIES ITSELF WITH SUBASTA (Subasta.com, an online auctioneer, formed an alliance with OM.From2.com, an e-commerce logistics company). South America Report. 01 August 1999. Vol. 4. No. 4. 1 page.	1-21
Y	MUELLNER, Alexis. Software firm taking aim at FedEx, DHL, and UPS . (From2.com). South Florida Business Journal. 30 July 1999. Vol. 19. No. 50. page 6A(2).	1, 2, 4-10, and 12-21
A	ANONYMOUS. Dialog (File 20: World Reporter). No. 6158215. From2.com Forms Strategic Alliance With Subasta.com. PR NEWswire. 12 July 1999. 2 pages.	1-21